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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/805,813	02/26/1997	ICHIRO MITSUHARA	085760-000	2736

7590 07/25/2003

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EXAMINER

KUBELIK, ANNE R

ART UNIT	PAPER NUMBER
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1638

4/8

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application N .

08/805,813

Applicant(s)

MITSUHARA ET AL.

Examiner

Anne R. Kubelik

Art Unit

1638

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 30 June 2003. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3. ☒ Applicant's reply has overcome the following rejection(s): 112, 2<sup>nd</sup>.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 48-49, 52-58, 62-67.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Continuation of 5. does NOT place the application in condition for allowance because:

112, 1st, enablement: Applicant urges that one of ordinary skill in the art, using routine experimentation, could substitute another signal sequence for the PR-1a signal sequence. Applicant urges that the sentence from the specification quoted in the prior office action refers to a Japanese Patent Application wherein the hinge region, not the signal sequence stabilizes the peptide. Applicant urges that pg 9 of the specification indicates that "plant gene" is not limited to the PR-1a gene. Applicant urges that any signal sequence could be used and it would be unduly restrictive to limit Applicant's invention to only one. This is not found persuasive. The definition of plant gene follows a statement on pg 8, lines 25-27, that the instant invention is a foreign gene linked to a plant gene via a tobacco chitinase hinge region; however, the specification on pg 2, lines 18-22, and pg 16, lines 13-17 state that the PR-1a protein "is required to stabilize the peptide". Thus, the specification requires the presence of Pr-1a. The specification teaches that PR-1a can be present in one of two ways, as either the signal peptide, in which case no second peptide is required (see the PSP construct), or as the second protein, wherein the PR-1a signal sequence is also present (see the PSS construct). The specification on pg 16, lines 23-25 states that this second construct requires the tobacco Pr-1a signal sequence. Thus, the specification itself requires the presence of PR-1a as the signal sequence and PR 1a as the second protein (if present). Buchanan could not be considered because it was not sent. Applicant urges that because stress-induced promoters are well-known in the art, it is not necessary to teach them in the specification, and lists, but does not enclose references that putatively teach such promoters. This is not found persuasive; the cited references could not be considered because they were not sent. Applicant urges that Okamoto use a bacterial gene in the fusion protein, while the instant invention uses a plant gene. This is not found persuasive because GUS has been successfully transformed into plants numerous times, and has not been shown to act unpredictably; thus, it is irrelevant that it is a bacterial gene.



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